PROPOSED CLAIM AMENDMENTS

9. (Currently Amended) A computer readable medium storing a program to cause a computer to execute a plurality of hierarchical control processes which are configured as a hierarchy of data communication processes and for individually performing the hierarchical control process corresponding to a level of the hierarchical data communication processing, and a data transfer control process for controlling data transfer among the plurality of hierarchical control processes, the program causing the computer to execute:

in each of the hierarchical control processes,

accessing connection management information stored in a predetermined memory area to manage data to be processed in a connection of data communication processing;

detecting an anomalous event in data during a data communication process;

setting another hierarchical control as a destination of transmitting the data and an anomaly indication in data transmission information when an anomalous event is detected in the data communication process;

sending the data transmission information including the destination and the anomaly indication to the data transfer control process;

detecting whether or not an anomaly indication is included in ~~the~~a data transmission information received from the data transfer control process, and

when the anomaly indication is detected in the ~~receiving~~received data transmission information, discarding data which is to be processed in the connection corresponding to the data transmission information in which the anomaly indication is detected; and

in the data transfer control process,

storing data transmission control information on the basis of the data transmission information received from the hierarchical control processes;

detecting whether or not the anomaly indication is included in the ~~receiving~~received data transmission information;

setting an anomaly indication in data transmission information when the anomaly indication is detected in the ~~receiving~~received data transmission information; and

simultaneously transmitting the data transmission information to the hierarchical control processes except for the hierarchical control process in which ~~the~~a first data transmission information was sent to the data transfer control process.

10. (Currently Amended) The computer readable medium according to claim 9, wherein the program causes the computer to execute:

in the data transfer control process,

when the anomaly indication is detected in the ~~receiving~~received data transmission information, discarding the data to be processed and data

transmission control information corresponding to the connection in which the anomalous event is detected.

11. (Currently Amended) A communication control method to cause a computer to execute a plurality of hierarchical control processes which are configured as a hierarchy of data communication processes and for individually performing the hierarchical control process corresponding to a level of the hierarchical data communication processing, and a data transfer control process for controlling data transfer among the plurality of hierarchical control processes, the method comprising the steps of:

in each of the hierarchical control processes,

accessing connection management information stored in a predetermined memory area to manage data to be processed in a connection of data communication processing;

detecting an anomalous event in data during a data communication process;

setting another hierarchical control as a destination of transmitting the data and an anomaly indication in data transmission information when an anomalous event is detected in the data communication process;

sending the data transmission information including the destination and the anomaly indication to the data transfer control process;

detecting whether or not an anomaly indication is included in the data transmission information received from the data transfer control process, and

when the anomaly indication is detected in the ~~receiving~~received data transmission information, discarding data which is to be processed in the connection corresponding to the data transmission information in which the anomaly indication is detected; and

in the data transfer control process,

storing data transmission control information on the basis of the data transmission information received from the hierarchical control processes;

detecting whether or not the anomaly indication is included in the ~~receiving~~received data transmission information;

setting an anomaly indication in data transmission information when the anomaly indication is detected in the ~~receiving~~received data transmission information; and

simultaneously transmitting the data transmission information to the hierarchical control processes except for the hierarchical control process in which ~~the~~a first data transmission information was sent to the data transfer control process.

12. (Currently Amended) A communication control method according to claim 11, wherein:

in the data transfer control process,

when the anomaly indication is detected in the ~~receiving~~received data transmission information, discarding the data to be processed and data transmission control information corresponding to the connection in which the anomalous event is detected.

13. (Currently Amended) A data processing apparatus comprising:

a plurality of hierarchical control processing means which are configured as a hierarchy of data communication processing means and for individually performing the hierarchical control processing means corresponding to a level of the hierarchical data communication processing means, and

a data transfer control processing means for controlling data transfer among the plurality of hierarchical control processing means,

wherein each of the hierarchical control processing means:

accesses connection management information stored in a predetermined memory area to manage data to be processed in a connection of data communication processing;

detects an anomalous event in data during a data communication process;

sets another hierarchical control as a destination of transmitting the data and an anomaly indication in data transmission information when an anomalous event is detected in the data communication process;

sends ~~the~~ data transmission information including the destination and the anomaly indication to the data transfer control processing means;

detects whether or not an anomaly indication is included in the data transmission information received from the data transfer control processing means, and

when the anomaly indication is detected in the ~~receiving~~received data transmission information, discards data which is to be processed in the connection corresponding to the data transmission information in which the anomaly indication is detected; and

wherein the data transfer control processing means:

stores data transmission control information on the basis of the data transmission information received from the hierarchical control processing means;

detects whether or not the anomaly indication is included in the ~~receiving~~received data transmission information;

sets an anomaly indication in data transmission information when the anomaly indication is detected in the ~~receiving~~received data transmission information; and

simultaneously transmits the data transmission information to the hierarchical control processing means except for the hierarchical control processing means in which ~~the~~a first data transmission information was sent to the data transfer control processing means.

14. (Currently Amended) A data processing apparatus according to claim 13, wherein in the data transfer control processing means, when the anomaly indication is detected in the ~~receiving~~received data transmission information, data to be processed and data transmission control information corresponding to the connection in which the anomalous event is detected are discarded.